

IN THE CLAIMS:

The following is a complete listing of the claims. This listing replaces all earlier versions and listings of the claims.

Claim 1 (currently amended): An ~~information-processing~~ information processing apparatus for displaying ~~and controlling~~ print previews of document data inputted from an application, said apparatus comprising:

obtaining means for obtaining device information indicating finishing information of a finisher connected to a printing apparatus and print setting information set via a user interface, wherein the device information includes finishing position information which may specify a finishing position on a physical page;

~~data-generating~~ data generation means for generating rendering data reflecting considerations for device information regarding a printer indicating the finishing position on the physical page to be executed by the printing apparatus according to the document data, ~~[[and]]~~ the device information and the print setting information being obtained by said obtaining means; and

~~displaying-and-controlling~~ display and control means for controlling to ~~allow displaying means to display~~ print previews of the document data in a window of a display means which reflects considerations for the device information regarding said printer, according to the generated rendering data,

wherein said data generation means specifies the finishing position on the physical page on the basis of finishing coordinates information as the finishing position information, and

wherein the print preview is displayed with the finishing position on the physical page to be executed by the printing apparatus in the same window of the display means.

Claim 2 (currently amended): ~~The information-processing~~ An information processing apparatus according to claim 1, further comprising:

~~device-information-requesting~~ device information requesting means for requesting the device information from ~~said printer~~ the printing apparatus, and

~~device-information-fetching~~ device information fetching means for fetching the device information from ~~said printer~~ the printing apparatus according to a request from said ~~device-information-requesting~~ device information requesting means.

Claim 3 (currently amended): ~~The information-processing~~ An information processing apparatus according to claim 1, wherein, when a defect is detected by said ~~data-generating~~ data generation means in an output from a device function based on the device information, said ~~displaying-and-controlling~~ display and control means[[,]] performs control ~~so that said displaying to cause the display~~ means displays to display information regarding the detection of the defect.

Claim 4 (currently amended): ~~The information-processing~~ An information processing apparatus according to claim 1, further comprising ~~correcting~~ correction means for correcting print-specification information for the document data after the print preview is displayed by the display means.

Claim 5 (currently amended): ~~The information-processing~~ An information processing apparatus according to claim 1, wherein said ~~data-generating~~ data generation means manages the device information according to a ~~printer~~ printing apparatus coordinate system.

Claim 6 (currently amended): ~~The information-processing~~ An information processing apparatus according to claim 1, further comprising spooling means for receiving the document data via rendering means controlled by an operating system and retaining the document data as intermediate data, wherein said ~~data-generating~~ data generation means generates rendering data from the intermediate data retained by said spooling means and ~~reoutputs~~ re-outputs the rendering data to said rendering means.

Claim 7 (currently amended): ~~The information-processing~~ An information processing apparatus according to claim 1, further comprising ~~print-data-generating~~ print data generation means for converting the rendering data inputted from said ~~data-generating~~ data generation means via rendering means controlled by an operating system to ~~print-data~~ print data that can be interpreted by ~~said printer~~ the printing apparatus.

Claim 8 (currently amended): ~~The information-processing~~ An information processing apparatus according to claim 7, further comprising ~~transmitting~~ transmission means for transmitting the ~~print-data~~ print data to ~~said printer~~ the printing apparatus via a network, the ~~print-data~~ print data having been converted and generated by said ~~print-data-generating~~ print data generation means.

Claim 9 (currently amended): ~~The information-processing~~ An information processing apparatus according to claim 1, wherein the device information is staple information.

Claim 10 (currently amended): ~~The information-processing~~ An information processing apparatus according to claim 1, wherein the device information is punched-hole information.

Claim 11 (currently amended): ~~An information-processing~~ information processing method of displaying ~~and controlling~~ print previews of document data inputted from an application, said method comprising:

an obtaining step of obtaining device information indicating finishing information of a finisher connected to a printing apparatus and print setting information set via a user interface, wherein the device information includes finishing position information which may specify a finishing position on a physical page;

a ~~data-generating~~ data generating step of generating rendering data reflecting considerations for device information regarding a printer indicating the finishing position on the physical page to be executed by the printing apparatus according to the document data, [[and]] the device information and the print setting information being obtained in said obtaining step; and

a ~~displaying-and-controlling~~ displaying and controlling step of controlling to ~~allow displaying means to display~~ print previews of the document data in a

window of a display means, which reflect considerations for the device information regarding ~~said printer~~, according to the generated rendering data,

wherein said data generating step includes specifying the finishing position on the physical page on the basis of finishing coordinates information as the finishing position information, and

wherein the print preview is displayed with the finishing position on the physical page to be executed by the printing apparatus in the same window of the display means.

Claim 12 (currently amended): ~~The information-processing~~ An information processing method according to claim 11, further comprising:

a ~~device-information-requesting~~ device information requesting step of requesting the device information from ~~said printer~~ the printing apparatus, and

a ~~device-information-fetching~~ device information fetching step of fetching the device information from ~~said printer~~ the printing apparatus according to a request in the device information.

Claim 13 (currently amended): ~~The information-processing~~ An information processing method according to claim 11, wherein, when a defect is detected in said ~~data-generating~~ data generating step in an output from a device function based on the device information, said ~~displaying-and-controlling~~ displaying and controlling step performs control ~~so that said displaying~~ to cause the display means displays to display information regarding the detection of the defect.

Claim 14 (currently amended): ~~The information-processing~~ An information processing method according to claim 11, further comprising a correcting step of correcting print-specification information for the document data after the print preview is displayed by the display means.

Claim 15 (currently amended): ~~The information-processing~~ An information processing method according to claim 11, wherein said ~~data-generating~~ data generating step ~~manages~~ includes managing the device information according to a printer printing apparatus coordinate system.

Claim 16 (currently amended): ~~The information-processing~~ An information processing method according to claim 11, further comprising a spooling step of receiving the document data via rendering means controlled by an operating system and retaining the document data as intermediate data in spooling means, wherein said ~~data-generating~~ data generating step ~~generates~~ includes generating rendering data from the intermediate data retained ~~[[by]]~~ in said spooling step and ~~reoutputs~~ re-outputs the rendering data to ~~[[said]]~~ the rendering means.

Claim 17 (currently amended): ~~The information-processing~~ An information processing method according to claim 11, further comprising a print-data print data generating step of converting the rendering data generated in said ~~data-generating~~ data generating step and inputted from said data generating step via rendering means controlled

by an operating system to ~~print-data~~ print data that can be interpreted by ~~said printer~~ the printing apparatus.

Claim 18 (currently amended): ~~The information-processing~~ An information processing method according to claim 17, further comprising a transmitting step of transmitting the ~~print-data~~ print data to ~~said printer~~ the printing apparatus via a network, the ~~print-data~~ print data having been converted and generated in ~~the print-data~~ said print data generating step.

Claim 19 (currently amended): ~~The information-processing~~ An information processing method according to claim 11, wherein the device information is staple information.

Claim 20 (currently amended): ~~The information-processing~~ An information processing method according to claim 11, wherein the device information is ~~punched-hole~~ punched-hole information.

Claim 21 (currently amended): A storage medium containing a ~~printer-driver program for controlling to allow displaying means to display print previews of document data inputted from an application, wherein said printer-driver program comprises~~ storing a program executing an information processing method of displaying print previews of document data inputted from an application, said program comprising:

code for an obtaining step of obtaining device information indicating finishing information of a finisher connected to a printing apparatus and print setting information set via a user interface, wherein the device information includes finishing position information which may specify a finishing position on a physical page;

~~data-generating program~~ code for a data generating step of generating rendering data reflecting considerations for device information regarding a printer according to the document data, [[and]] the device information and the print setting information being obtained in said obtaining step; and

~~displaying-and-controlling program~~ code for a displaying and controlling step of controlling to allow the displaying means to display print previews of the document data in a window of a display means, which reflect considerations for the device information regarding said printer, according to the generated rendering data,

wherein said code for a data generating step includes specifying the finishing position on the physical page on the basis of finishing coordinates information as the finishing position information, and

wherein the print preview is displayed with the finishing position on the physical page to be executed by the printing apparatus in the same window of the display means.

Claim 22 (currently amended): [[The]] A storage medium containing a printer-driver program according to claim 21, wherein said printer-driver program further comprises:



~~device-information-requesting program~~ code for a device  
information requesting step of requesting the device information from ~~said printer the~~  
printing apparatus, and

~~device-information-fetching program~~ code for a device information  
fetching step of fetching the device information from ~~said printer the printing~~  
apparatus according to a request from said ~~device-information-requesting program~~ code for  
a device information requesting step.

Claim 23 (currently amended): ~~[[The]]~~ A storage medium ~~containing a~~  
~~printer-driver program~~ according to claim 21, wherein, when a defect is detected by said  
~~data-generating program~~ code for a data generating step in an output from a device function  
based on the device information, said ~~displaying-and-controlling program~~ code for a  
displaying and controlling step performs control ~~so that said displaying to cause the display~~  
means displays to display information regarding the detection of the defect.

Claim 24 (currently amended): ~~[[The]]~~ A storage medium ~~containing a~~  
~~printer-driver program~~ according to claim 21, wherein said ~~printer-driver~~ program further  
comprises ~~correcting program~~ code for a correcting step of correcting print-specification  
information for the document data after the print preview is displayed by the display  
means.

Claim 25 (currently amended): ~~[[The]]~~ A storage medium ~~containing a~~  
~~printer-driver program~~ according to claim 21, wherein said ~~data-generating program~~ code

for a data generating step includes managing ~~manages~~ the device information according to a ~~printer printing apparatus~~ coordinate system.

Claim 26 (currently amended): ~~[[The]]~~ A storage medium ~~containing a printer-driver program~~ according to claim 21, wherein said ~~printer-driver~~ program further comprises ~~spooling program~~ code for a spooling step of receiving the document data via rendering means controlled by an operating system and retaining the document data as intermediate data, wherein said ~~data-generating program~~ code for a data generating step includes generating ~~generates~~ rendering data from the intermediate data retained by said ~~spooling program~~ code for a spooling step and ~~reoutputs~~ re-outputs the rendering data to ~~[[said]]~~ the rendering means.

Claim 27 (currently amended): ~~[[The]]~~ A storage medium ~~containing a printer-driver program~~ according to claim 21, wherein said ~~printer-driver~~ program further comprises ~~print-data generating program~~ code for a print data generating step of converting the rendering data inputted from said ~~data-generating program~~ code for a data generating step via ~~[[said]]~~ rendering means controlled by ~~[[said]]~~ an operating system to ~~print-data~~ print data that can be interpreted by ~~said printer~~ the printing apparatus.

Claim 28 (currently amended): ~~[[The]]~~ A storage medium ~~containing a printer-driver program~~ according to claim 27, wherein said ~~printer-driver~~ program further comprises ~~transmitting program~~ code for a transmitting step of transmitting the ~~print-data~~ print data to ~~said printer~~ the printing apparatus via a network, the ~~print-data~~ print data

having been converted and generated by the ~~print-data-generating program~~ code for a print data generating step.

Claim 29 (currently amended): ~~[[The]]~~ A storage medium containing a printer-driver program according to claim 21, wherein the device information is staple information.

Claim 30 (currently amended): ~~[[The]]~~ A storage medium containing a printer-driver program according to claim 21, wherein the device information is punched-hole information.

Claims 31-66 (canceled)

Claim 67 (currently amended): ~~A printer-driver program for controlling preview display of document data generated by an application~~ executing an information processing method of displaying print preview of document data inputted from an application, said program comprising:

code for an obtaining step of obtaining device information indicating finishing information of a finisher connected to a printing apparatus and print setting information set via a user interface, wherein the device information includes finishing position information which may specify a finishing position on a physical page;

data-generating program code for a data generating step of  
generating rendering data ~~reflecting considerations for device information regarding a~~

printer according to the document data, ~~[[and]]~~ the device information and the print setting information being obtained in said obtaining step; and

~~displaying-and-controlling program~~ code for a displaying and controlling step of controlling to allow the displaying means to display print previews of the document data in a window of a display means; which reflect considerations for the device information regarding said printer; according to the generated rendering data,

wherein said code for a data generating step includes specifying the finishing position on the physical page on the basis of finishing coordinates information as the finishing position information, and

wherein the print preview is displayed with the finishing position on the physical page to be executed by the printing apparatus in the same window of the display means.

Claim 68 (currently amended): ~~The printer-driver~~ A program according to claim 67, wherein said ~~printer-driver~~ program further comprises:

~~device-information-requesting program~~ code for a device information requesting step of requesting the device information from said printer the printing apparatus, and

~~device-information-fetching program~~ code for a device information fetching step of fetching the device information from said printer the printing apparatus according to a request from said device-information-requesting program code for a device information requesting step.

Claim 69 (currently amended): ~~The printer-driver~~ A program according to claim 67, wherein, when a defect is detected by said ~~data-generating program~~ code for a data generating step in an output from a device function based on the device information, said ~~displaying-and-controlling program~~ code for a displaying and controlling step performs control ~~so that said displaying~~ to cause the display means displays to display information regarding the detection of the defect.

Claim 70 (currently amended): ~~The printer-driver~~ A program according to claim 67, wherein said ~~printer-driver~~ program further comprises ~~correcting program~~ code for a correcting step of correcting print-specification information for the document data after the print preview is displayed by the display means.

Claim 71 (currently amended): ~~The printer-driver~~ A program according to claim 67, wherein said ~~data-generating program~~ code for a data generating step includes managing manages the device information according to a printer printing apparatus coordinate system.

Claim 72 (currently amended): The printer-driver program according to claim 67, wherein said ~~printer-driver~~ program further comprises ~~spooling program~~ code for a spooling step of receiving the document data via rendering means controlled by an operating system and retaining the document data as intermediate data, wherein said ~~data-generating program~~ code for a data generating step includes generating generates

rendering data from the intermediate data retained by said ~~spooling program~~ code for a spooling step and ~~reoutputs~~ re-outputs the rendering data to ~~[[said]]~~ the rendering means.

Claim 73 (currently amended): ~~The printer-driver~~ A program according to claim 67, wherein said ~~printer-driver~~ program further comprises ~~print-data generating program~~ code for a print data generating step of converting the rendering data inputted from said ~~data-generating program~~ code for a data generating step via ~~[[said]]~~ rendering means controlled by ~~[[said]]~~ an operating system to ~~print-data~~ print data that can be interpreted by said ~~printer~~ the printing apparatus.

Claim 74 (currently amended): ~~The printer-driver~~ A program according to claim 73, wherein said ~~printer-driver~~ program further comprises ~~transmitting program~~ code for a transmitting step of transmitting the ~~print-data~~ print data to ~~said printer~~ the printing apparatus via a network, the ~~print-data~~ print data having been converted and generated by the ~~print-data generating program~~ code for a print data generating step.

Claim 75 (currently amended): ~~The printer-driver~~ A program according to claim 67, wherein the device information is staple information.

Claim 76 (currently amended): ~~The printer-driver~~ A program according to claim 67, wherein the device information is punched-hole information.

Claims 77-88 (canceled)